CONFIRMED MINUTES OF THE 13TH MEETING OF THE UK NATIONAL AEROSPACE NDT BOARD

Meeting Date: Thursday 16th August 2007
Location: BAE Systems, Warton

1. Confirmation of the agenda
   a. The agenda was confirmed with a number of additional topics to be dealt with under 'Any Other Business'.

2. Attendance & apologies for absence
   a. The meeting was attended by Jon Biddulph (Chairman), Mark Barker, John Hewitt, Graham McCully, Eric McIlroy, Chris Dootson, Roger Hogarth, Stanley Gane, Colin Thomas and John Thompson (Secretary).
   b. Apologies were recorded for Phil Berkley, Ian Chapman (CAA) and Bob Murrell.

3. Notes of the last meeting
   a. The notes of the 12th meeting (distributed earlier) were confirmed as accurate and authorised for publication on the Board’s web pages.

   Action 14/2007: Secretary to arrange for the confirmed minutes to be uploaded to the Board’s web pages.

4. Matters arising from the minutes (not covered by an agenda item) were:
   a. Action 09/2007: Training and Examination datasheets
      i. The Board considered responses received from outside agencies regarding training and examination datasheets that had been drafted at the previous meeting and circulated to UK TEG members.
      ii. A general comment, which had suggested that one or more Outside agencies were conducting ‘open book’ specific examinations was discussed in some detail. The Board pointed out that specific examinations should be conducted as required in EN 4179.
iii. Following a review of the general and specific comments received, which included a proposal that the Board approve a common format of training and examination datasheet which included the Board’s logo, it was agreed that Colin Thomas, who represented UK TEG at the meetings of the Board, should convene a TEG WG to design and propose a common format for training and examination datasheets embodying the essential data agreed by the Board, upon which the Board’s logo, as shown at the head of these minutes, would be displayed.

**Action 15/2007: Colin Thomas** to convene UK TEG WG to agree common format and forward output to the Secretary by 31st October 2007 for circulation to the Board prior to the next meeting.


i. A proposal in the form of a PowerPoint presentation of Level 2 (limited) Certification had been forwarded to the CAA with a request for feedback by this meeting. Mark Barker (CAA) stated that the presentation, per sé, was okay, but that the extent of the proposal appeared to have “mushroomed” to become what appeared to be a ‘relaxation’ of the present understanding of level 2 competence.

ii. An example of limited application of Eddy Current Testing was cited; the full experience requirement of 4179 was 1,600 hrs. The proposed level 2 limited application of ET using one simple technique would lead to the award of limited certification after only 10% of the level 1 requirement of 400 hour, i.e., after 40 hours experience. It was pointed out that wheel testing, for example, would not be considered a limited application and the full 1,600 hours of experience could soon be acquired by NDT personnel working in a wheel bay.

iii. Mark Barker pointed out that, in the present draft GR23, the existing proposal for use of limited certification was restricted to the maintenance sector (i.e., it is not available in the manufacturing sector). MB considered that, if the minimum experience requirement of EN 4179 were considered too onerous, then the standard should be amended.

iv. Board members queried whether it was acceptable to the CAA to utilise Level 2 ‘limited’ certification in the manufacturing sector when introducing new inspection technologies. MB confirmed that this was accepted practice, and went on to state that GR23 embodied the concept of limited certification for simple ‘go / no go’ testing applications in the maintenance sector.

v. It was agreed that the Limited Certification proposal was not ready for use yet, and that the PowerPoint presentation of Limited certification be revised in the light of the present discussion.

**Action 16/2007: Graham McCully** to revise PP presentation in consultation with Board members and the CAA.


John Hewitt had identified a number of typographic errors for correction but, other than these, had identified no requirement for revision. Action 17/2007: Secretary to incorporate amendments to remove typos and re-issue with new review date in NADNDT/01.

d. Action 12/2007: Submit comments on behalf of the Board to the NAS/EN WG.

Jon Biddulph presented a report of the comments submitted and the responses of the WG. It was noted that few of the proposed amendments submitted in the name of the Board had been accepted.

**Secretary’s note:** An Excel file of all comments and reactions was provided and is circulated with these minutes.
5. Membership
   a. The Secretary had received a membership application from Goodrich, which he tabled together with a copy of the Board’s constitution.
   b. The Board noted that Goodrich was one of some 60 organisations in the UK that held EASA design authority (in the case of Goodrich, for actuators and control systems), and was therefore recognised by the CAA. Whilst this satisfied the requirements for membership as defined in the Board’s constitution, the Board considered that to grant membership in this instance would likely lead to a flood of membership applications resulting in, if all were granted, an unworkable and unwieldy Board. It was agreed that the secretary would communicate the decision of the Board to Mr. Harper of Goodrich.

**Action 17/2007: Secretary**

6. NANDTB documents NANDTB/01
   a. To note status and assign review responsibility for
      i. NANDTB/13 (control of PCN examination papers). Responsibility had been assigned at the 12th meeting to John Hewitt, and he presented a brief report to the meeting on the results of his review. Document to be subject of minor revision.
      ii. NANDTB/14 (introduction of new technology). The Board had previously developed a PPP on the subject. The Board agreed that the review should take into account the existence of two publications on this subject.

**Action18/2007: Chairman** to review both and propose actions.

7. External regulations, standards or specifications
   a. GR23
      i. The CAA representative, Mark Barker, who had circulated draft UK Generic Requirements (GR23) covering qualification of NDT personnel for review and comment by NANDTB members, presented the proposed editorial and substantive changes to the present meeting.
      ii. The CAA invited comments from Board members, with a closing date of 30 September. It was envisaged that the revision will be published by March 2008.

**Action 18/2007: all members** to review and, if appropriate, offer comments to Mark Barker at the CAA by 30th September 2007.

b. EN 4179
   i. The Chairman provided an update from the NAS/EN WG, including the responses to comments provided by Jon Biddulph. The comments document was provided for distribution to members for review, and if any particular issues were considered worthy of further comment, to notify JB directly by the end of August.

**Action 19/2007: all members** to review UK comments and WG responses in circulated Excel file and advise the Chairman directly, by the end of August 2007, if they consider that any particular WG response to UK Board comments should be the subject of further correspondence.

8. Control of Qualifying Agencies
   a. PCN Aerospace AQB Audits
      i. The Board noted that a witnessed assessment of TWI examination services, Cambridge, was to take place 8th November 2007, and this was to be witnessed by Bobby Scott (NANDTB/Bombardier) and Marie Kelly (Manager designate, BINDT Certification Services).
      ii. It was noted that the SWS of NDT were due a surveillance visit on 12th September 2007. John Thompson reported that he was assigned lead assessor for this visit.
iii. The Secretary reported that he believed that he would continue to be assigned assessor for PCN Aerospace AQB following his retirement from BINDT in March 2008.

b. Outside Agency audits (Outside Agency employed members retired from the meeting room for discussion of this item)

i. The Secretary reported on follow-up assessment of 18\textsuperscript{th} June 2007. The Board reviewed the assessment report and noted the recommendations of the assessor, but required further corrective action regarding NCR/1 (re-examination using 40 m/c questions).

**Action 20/2007: Secretary** to follow up with the OA concerned regarding corrective action for NCR 1 of 3

ii. The Secretary reported receiving an application for assessment and accreditation as an outside agency from a company based in Sheffield. The assessment was scheduled for 22\textsuperscript{nd} August 2007.

9. Liaison and contact with other NANDTB

a. Report from 29\textsuperscript{th} June 2007 European Forum in Istanbul

The minutes of the meeting had been circulated to the Board in advance of the present meeting.

b. ANDTBF Action Plan

The ANDTBF action plan was projected and reviewed. Regarding ANDTBF action on EASA regulations, Mark Barker agreed to assist the Secretary with drafting a letter to Mr. Wyles of EASA in connection with the possible revision of parts 21 and 145 in an EASA WG.

**Action 21/2007: Secretary** to circulate the ANDTBF papers, including attendance lists, and to discuss with MB the draft of a letter to Mr. Wyles.

10. Any other business

a. Status of 4179 and PCN/AERO: how far does the Board feel that PCN satisfy 4179?

i. It was noted that PCN/AERO was recognised as mainly for use in part 145 situations, though it might well be partially useful in some part 21 situations. One example was presented of a part 21 company documenting that the PCN certificate can be accepted as evidence of full competence within the company scheme. This had been rejected by Nadcap during an audit.

ii. It was reported that Nadcap is widely rejecting PCN certification, and it was suggested that PRI (Phil Ford) is supporting this stance. It was also suggested that the NANDTB/10 document be revised to clarify the Board’s position on recognition of PCN Aero certification for Part 21 organisations, i.e., that the employer shall conduct specific written and practical examinations under 4179.

iii. Mark Barker (CAA Observer) expressed concern that a Nadcap audit finding had effectively ruled out the ability of a UK manufacturer to evaluate and accept PCN certification as satisfying the qualification requirements of 4179.

iv. It was agreed that this topic is sufficiently important to warrant a full agenda item at the next meeting, and that further information was required to facilitate this. It was agreed that the presence of a Nadcap representative at one or more future meetings would be beneficial.

**Action 22/2007: Colin Thomas** to discuss with Phil Ford and the company concerned, and to feed the results of his discussion to the Secretary for presentation at the next meeting. **The Secretary** to invite Phil Ford to attend the after lunch portion of the next meeting.

b. Clarification on qualifications for UT thickness gauging (digital):

i. GMcC reported findings at a company using digital thickness gauges that required the operators to hold a qualification, in spite of the fact that 4179
clause 4.2 allowed an exception for qualification of operators using direct read-out instruments.

ii. The Board agreed that 4179 qualification may be unnecessary, but that such operators should be trained and demonstrated competent under some form of documented internal system under the control of the company’s nominated Level 3.

c. Number of allowed re-examination attempts. Chairman advised that RR allows a maximum of three re-examinations when a candidate fails an exam with additional training provided, albeit there is no similar stipulation in EN4179. Chairman asked if other Primes had a similar requirement. A number of Primes reported that they did specify a similar requirement and that the RR approach was thought to have been copied by a number of companies.

d. Mark Barker advised that a newly appointed head of engineering at CAA has taken post with effect from 10th August 2007, and Mark Barker will accept a transfer to that department, but will retain responsibility for control of NDT in manufacturing. Ian Chapman will continue to look after NDT in Maintenance.

11. Date and location of the next meeting(s) of the UK NANDTB
   a. 22nd November 2007 at Airbus UK, Filton.
   b. 2008 provisional dates/locations to be decided at the next meeting (all members’ representatives are invited to offer/propose locations and dates).

Assignments and timescales

<table>
<thead>
<tr>
<th>Ref</th>
<th>Action</th>
<th>Assignment</th>
<th>Action by / Status</th>
</tr>
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<tbody>
<tr>
<td>14</td>
<td>Arrange for the confirmed minutes to be uploaded to the Board’s web pages.</td>
<td>Secretary</td>
<td>2007-08-31</td>
</tr>
<tr>
<td>15</td>
<td>To convene UK TEG WG to agree common format and forward output to the Secretary for circulation to the Board prior to the next meeting.</td>
<td>Colin Thomas</td>
<td>2007-10-31</td>
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<tr>
<td>16</td>
<td>Revise PP presentation in consultation with Board members and the CAA.</td>
<td>Graham McCully</td>
<td>2007-10-31</td>
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<tr>
<td>17</td>
<td>communicate the decision of the Board regarding membership to Mr. Harper of Goodrich</td>
<td>John Thompson</td>
<td>Discharged</td>
</tr>
<tr>
<td>18</td>
<td>review both NANDTB/14 and PowerPoint presentation on the same subject (introduction of new technology) and propose actions, sending output to Secretary for distribution</td>
<td>Jon Biddulph</td>
<td>2007-10-31</td>
</tr>
<tr>
<td>19</td>
<td>Review UK comments and EN/NAS WG responses in circulated Excel file, and advise the Chairman directly if they consider that any particular WG response to UK Board comments should be the subject of further correspondence.</td>
<td>All members</td>
<td>2007-08-31</td>
</tr>
<tr>
<td>20</td>
<td>Follow up regarding corrective action for NCR 1 of 3, which the Board agreed should be a re-examination of the candidate concerned in the specific part.</td>
<td>John Thompson</td>
<td>Discharged</td>
</tr>
<tr>
<td>21</td>
<td>Circulate the ANDTBF papers, including attendance lists, and to discuss with MB the draft of a letter to Mr. Wyles.</td>
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<td>22</td>
<td>Discuss with Phil Ford of PRI Nadcap and with the company concerned in this context, and to feed the results of his discussion to the Secretary for presentation at the next meeting. Invite Phil Ford to attend the after lunch portion of the next meeting.</td>
<td>Colin Thomas</td>
<td>2007-09-30</td>
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<td>John Thompson</td>
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